



1 EXECUTIVE SUMMARY

The National Audio Visual Conservation Center mechanical systems were evaluated with LEED-NC Version 2.2, ASHRAE Standard 90.1 – 2004, and Trane TRACE to verify that the building is environmentally and energy conscious. Because the building serves many different functions including storage spaces for different media types, conservation office and lab space where the media is restored and conserved, and public areas to view and listen to the media, there are many different systems providing each space with different conditions. As a result, a simple analysis of loads and energy consumption may cause inaccuracies. For further analysis it may be beneficial to utilize a more advanced program.

In this report, all three buildings are examined together. As a result many of the calculations became rather lengthy and may be found in the Appendix.